

### **REMARKS**

The Official Action mailed June 2, 2005, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on April 7, 1999, March 14, 2000, August 24, 2000, October 19, 2000, December 12, 2000, April 26, 2001, September 5, 2001, December 10, 2001, February 11, 2002, September 17, 2002, May 3, 2004, and March 17, 2005. However, the Applicants have not received acknowledgment of the Information Disclosure Statement filed on May 23, 2005 (received by OIPE May 25, 2005, and scanned into IFW). The Applicants respectfully request that the Examiner provide an initialed copy of the Form PTO-1449 evidencing consideration of this Information Disclosure Statement.

Claims 4, 9, 14, 25, 33, 36-38, 43, 51 and 54-68 were pending in the present application prior to the above amendment. Claims 4, 9, 14, 33, 36-38, 51, 54-66 and 68 have been canceled, independent claims 25 and 67 have been amended to better recite the features of the present invention, and new claims 69-99 have been added to recite additional protection to which the Applicants are entitled. Accordingly, claims 25, 43, 67 and 69-99 are now pending in the present application, of which claims 25, 67, 73, 85, 90 and 95 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 2 of the Official Action rejects claims 65 and 66 as obvious based on the combination of JP 01-156725 to Matsueda and U.S. Patent No. 5,055,899 to Wakai et al. Paragraph 3 of the Official Action rejects claims 4, 9, 14, 25, 33, 36-38, 43, 51, 54-64, 67 and 68 as obvious based on the combination of Matsueda, Wakai and U.S. Patent No. 5,614,730 to Nakazawa et al. Independent claims 4, 9, 14, 33, 63, 65 and 68 (and their dependent claims) have been canceled without prejudice or disclaimer. Regarding independent claims 25, 67, the Applicants respectfully submit that a *prima*

*facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. Independent claims 25 and 67 have been amended to recite a lead electrode formed over an interlayer insulating film and electrically connected to one of source or drain regions of a thin film transistor through a first hole of the interlayer insulating film, and a pixel electrode formed over an organic resin film, the pixel electrode being electrically connected to the one of the source or drain regions of the thin film transistor via the lead electrode and through a second hole of the organic resin film, where the first hole and the second hole do not overlap to each other. In other words, claims 25 and 67 recite that a lead electrode is electrically connected to one of the source or drain regions through a first hole of an insulating film,

and a pixel electrode is electrically connected to the lead electrode through a second hole of an organic resin film where the first hole and the second hole do not overlap to each other. (The claims have also been amended to remove features which are not believed to be critical to the patentability of the claims, i.e. "comprising aluminum".) The above-referenced features of claims 27 and 67 are advantageous in that an etching step to form the second hole can be facilitated as compared with a case where the first hole and the second hole overlap each other.

The advantages of the above-referenced features are explained as follows: The lead electrode naturally has a stepped portion due to the first hole of the first insulating film. Such a stepped portion makes it difficult to perform an etching process for forming a second hole in the second insulating film over the lead electrode if the second hole is intended to be formed over the first hole. However, it is possible to avoid such difficulty if the second hole is intentionally located so as not to overlap the first hole.

The Official Action asserts that "Matsueda shows two different contact holes not overlapping with each other (see at least Figures 2, 4)" (page 3, Paper No. 05262005). The Applicants traversed this assertion in the previously filed *Amendment*. The "Response to Arguments" simply continues to assert that Figures 2 and 4 teach the above-referenced features (page 4, Id.). The Applicants disagree and traverse the assertion in the Official Action.

Figure 2 of Matsueda appears to show two holes, that is, a first hole, which is for a connection between a data line 12 and a TFT 14 and a second hole, which is for a connection between a pixel electrode 11 and the TFT 14. Thus, the two contact holes are directed to two different connections. However, in the claims of the present application, both of the first and second holes are provided for an electrical connection between a pixel electrode and one of the source or drain regions. Also, in Figure 4, Matsueda shows an insulating film 46 which allegedly corresponds to the claimed insulating film and a second insulating film 52 which allegedly corresponds to the claimed organic resin film. However, it should be noted that the contact hole of the

insulating film 46 and the contact hole of the insulating film 52 completely overlap. Therefore, Matsueda does not teach or suggest that a lead electrode is electrically connected to one of the source or drain regions through a first hole of an insulating film, and a pixel electrode is electrically connected to the lead electrode through a second hole of an organic resin film where the first hole and the second hole do not overlap to each other.

Wakai and Nakazawa do not cure the deficiencies in Matsueda. The Official Action relies on Wakai to teach that it would have been obvious to incorporate a lead/first electrode into Matsueda (pages 2-3, Paper No. 05262005). The Official Action relies on Nakazawa to teach that it would have been obvious to incorporate a blocking film into the combined device of Matsueda and Wakai (page 4, Paper No. 05262005). However, Matsueda, Wakai and Nakazawa, either alone or in combination, do not teach or suggest that a lead electrode is electrically connected to one of the source or drain regions through a first hole of an insulating film, and a pixel electrode is electrically connected to the lead electrode through a second hole of an organic resin film where the first hole and the second hole do not overlap to each other.

Since Matsueda, Wakai and Nakazawa do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

New claims 69-99 have been added to recite additional protection to which the Applicants are entitled. Claims 25, 67 and 73 are substantially similar except for the recitations in the preamble. Also, independent claims 85, 90 and 95 are based at least in part on claims 25, 67 and 73, respectively, and further recite that a contact surface between a lead electrode and one of source and drain regions does not overlap with a contact surface between the lead electrode and a pixel electrode. For the reasons stated above and already of record, the Applicants respectfully submit that new claims 69-99 are in condition for allowance.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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